

# Wool and Rubble Walls

## *Domestic Archaeology in the Medieval Peloponnese*

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When Giorgio Vasari set out the rules of art for the Western tradition, he established a hierarchy of fine and applied arts that privileged painting and sculpture for their ideational separation from ordinary life and production. Applied or decorative arts, on the other hand, he deemed inferior because of their utilitarian engagement with daily life. Diego Velázquez exploited this hierarchy in his painting *The Spinners* (1655–60), using Baroque spatial contradictions to undermine Renaissance pictorial conventions (fig. 1). A bright, elevated space in the background of the painting stages the elevation of textiles from the applied to the fine arts. A tapestry hangs like a painting within the painting and is studied by three aristocratic ladies, well dressed and liberally educated, who admire the narrative derived from Ovid. The mortal Arachne challenges Athena to a spinning contest in the textile, while Velázquez challenges Renaissance aesthetics in his painting. One of the three ladies turns away from the textile and, looking straight toward the viewer, acknowledges another party of women in the foreground, who are engaged in the physical manufacture of cloth. They are fleshy, rustic members of a lower class toiling behind the scenes to produce the rarefied textile staged as a work of art. Velázquez problematizes the hierarchy of crafts embedded within the art system and forces the viewer to confront the ignoble makers through a new realism. The painting “theorizes painterly performance,” in the words of Giles Knox, and offers Renaissance art an exit toward a more materialist

reality in the foreground.<sup>1</sup> The spinners in all their quotidian realism are a much more difficult subject, whose very painterly execution proves the artist’s mastery. Since the economic prominence of Florence was based on its wool economy, it is appropriate that Velázquez critiques Florentine humanism by referencing the craft of textiles.<sup>2</sup>

Although not explicitly, Velázquez also anticipates the critique of the scholarly tradition on Byzantine textiles as objects of exquisite quality that are framed and exhibited as museum pieces. Like the educated, aristocratic ladies who read Ovid, modern viewers ascend the museological podium and admire the exquisite beauty of objects like *Hanging with Hestia Polyolbos* at Dumbarton Oaks (BZ.1929.1). Velázquez invites us to lower our gaze to the ground and seek out the makers of textiles, to contextualize their labor inside their domestic spaces, and to examine the landscapes that supplied raw materials and the energy expended in production.

Anthropologists and archaeologists have also invited us to turn our gaze to lower registers, toward entangled realities, taskscapes, and symmetrical

1 G. Knox, *The Late Paintings of Velázquez: Theorizing Painterly Performance* (Farnham, UK, 2008), see esp. 107–14 on Knox’s reading of *The Spinners* as a critique of the hierarchy of the genres.

2 R. A. Goldthwaite, *The Economy of Renaissance Florence* (Baltimore, 2009), 265–82.



Fig. 1. Diego Velázquez, *The Spinners, or the Fable of Arachne*, 1655–60; oil on canvas; 220 × 289 cm. Museo del Prado, Madrid. Artwork in the public domain; photograph by Enrique Cordero / Wikimedia Commons.

materialities.<sup>3</sup> During the 1960s, archaeologists rejected the culture-based antiquarianism of their profession and devised the new field of processual archaeology (or New Archaeology) to privilege social processes over the fetishized object. Partnering with the disciplines of material culture and social and environmental sciences, archaeology came to resist Vasari's hierarchy of objects, seeking above all to illuminate human processes rather than just unearth exhibition-worthy artifacts.<sup>4</sup> The pioneering Minnesota Messenia Expedition (MME)

that began in 1962 developed the methodology of regional pedestrian survey, where archaeologists walk through large tracts of land and collect all surface finds. Through this process, New Archaeology could accomplish its promised processualist objectives while critiquing the culture-based archaeology of the past.<sup>5</sup>

*Material Culture Studies*, ed. D. Hicks and M. C. Beaudry (Oxford, 2010), 25–98.

<sup>3</sup> W. McDonald and G. R. Rapp Jr., eds., *The Minnesota Messenia Expedition: Reconstructing a Bronze Age Regional Environment* (Minneapolis, 1972). Timothy Gregory outlined the agenda for Byzantine landscape archaeology in 1981, but only a few have followed (Pamela Armstrong, Joanita Vroom, Archie Dunn, Guy Sanders, William Caraher, David Pettegrew, Fotini Kondyli, et al.): see T. E. Gregory, "Archaeological Survey in the Study of Byzantine Historical Geography," in *XVI. Internationaler Byzantinistenkongress, Wien, 4.–9. Oktober 1981*, *JÖB* 31, Beiheft 2.2 (1981). The absence of landscape archaeology is striking in surveys such as A. E. Laiou, ed., *The Economic History of Byzantium*, 3 vols. (Washington,

3 I. Hodder, *Entangled: An Archaeology of the Relationships Between Humans and Things* (Malden, MA, 2012); T. Ingold, *Making: Anthropology, Archaeology, Art and Architecture* (London, 2013); B. Olsen, "Symmetrical Archaeology," in *Archaeological Theory Today*, ed. I. Hodder, 2nd ed. (Oxford, 2012), 208–28.

4 C. Renfrew and P. Bahn, *Archaeology: Theories, Methods, and Practice*, 3rd ed. (London, 2000), 39; D. Hicks, "The Material-Cultural Turn: Event and Effect," in *The Oxford Handbook of*



By mapping the locations of settlements across time, processual archaeologists have been able to discern disruptions and continuities in the landscape that are connected to great shifts in production processes. The Peloponnese peninsula in Greece has received the greatest attention from landscape archaeologists, with no fewer than twenty pedestrian surveys carried out between 1962 and 2017.<sup>6</sup> Collectively, the pedestrian surveys of the last half-century have provided the most thorough profile of any medieval landscape and corroborate the well-documented historical processes of village nucleation during the middle and late Byzantine periods. Dispersed hamlets were abandoned as the rural population moved to higher elevations, congregating around hilltops.

Many forces contributed to the emergence of the medieval settlement pattern in Greece, but most important was the foundation of a new form of connectivity through the mountains associated with the seasonal movements of animals and the exploitation of pastures.<sup>7</sup> The archaeology of medieval Greek

pastoralism thus provides insights into the production of wool. The remains of rubble walls provide evidence for the organic processes that took place within medieval Greek villages, while illustrating the very reason for that settlement's construction. As our only material evidence of rural life in the medieval Peloponnese, these rubble walls indicate the spatial containment of villages near the precise ecological resources necessary for the exploitation of wool, and therefore the production of textiles.

The emergence of a new medieval agrarian landscape in the northwestern Peloponnese corresponds with the reestablishment of imperial authority in the ninth century, particularly the reconquest of the city of Patras. Peloponnesian textiles from this period do not survive, due to the volatile history of the region and the fragility of the material. However, combining the evidence of rubble walls with the scant textual sources from the region can assist in making a strong, albeit circumstantial, argument for a flourishing domestic industry. The sources direct our attention, for example, to the large carpet commissioned to adorn the most important middle Byzantine imperial foundation, Emperor Basil I's Nea Ekklesia in Constantinople (876–880). The famous story of Danelis's woolen gifts in Byzantine historiography should be read as an ideological manifestation of the region's rising prestige in textile production and its exploitation of its woolen resources. The Crusader conquest of the Peloponnese in 1206 connected this region with Latin clientele, whose archives survive better. As a later testament, an *epitaphios* at the Victoria and Albert Museum gives a faint glimpse of this region's productivity when the textile (dated 1406/7) was commissioned.<sup>8</sup>

## Archaeological Surveys

Certain industrial activities of the middle and late Byzantine periods—like ceramics, metallurgy, or lime procurement for construction—left behind enduring inorganic traces, such as wasters (pieces of defective

DC, 2008); L. James, ed., *A Companion to Byzantium* (Malden, MA, 2010); P. Stephenson, ed., *The Byzantine World* (Abingdon, UK, 2010); and S. E. J. Gerstel, *Rural Lives and Landscapes in Late Byzantium: Art, Archaeology, and Ethnography* (New York, 2015).

6 Published surveys of the Peloponnese include the Minnesota Messenia Expedition, Five Rivers Area Survey, Pylos Regional Archaeological Project, Southern Argolid Exploration Project, Peneios River Survey, Berbati-Limnes Archaeological Survey, Methana Survey Project, Western Achaia Survey, Laconia Survey, Eastern Korinthia Archaeological Survey, Nemea Valley Archaeological Project, Morea Project, Kleonai Survey, Western Argolid Regional Project. In the rest of Greece: Asea Valley Survey, Troodos Archaeological and Environmental Survey Project, Boeotia Survey, Eastern Boeotia Archaeological Project, Survey of Thisve (Byzantine Kastorion). For theoretical considerations of field survey and medieval Greece, see J. Rosser, "A Research Strategy for Byzantine Archaeology," *ByzSt* 6, no. 1 (1979): 152–66; D. W. Rupp, "Problems in Byzantine Field Reconnaissance: A Non-Specialist's View," *ByzSt* 13, no. 2 (1986): 177–78; and T. E. Gregory, "Intensive Archaeological Survey and Its Place in Byzantine Studies," *ByzSt* 13, no. 2 (1986): 155–75. For a synthetic reconsideration of Byzantine history based on surface survey, see J. Bintliff, *The Complete Archaeology of Greece: From Hunter-Gatherers to the 20th Century AD* (Malden, MA, 2012), 381–435. Bintliff was the director of the Boeotia Survey.

7 G. D. R. Sanders and I. K. Whitbread, "Central Places and Major Roads in the Peloponnese," *BSA* 85 (1990): 333–61; K. Kourelis, "Zaraka Surrounded: The Archaeology of Settlements in the Peloponnesian Countryside," in *The Cistercian Monastery of Zaraka, Greece*, ed. S. Campbell (Kalamazoo, MI, 2018), 193–213. For methodological development in the archaeology of pastoralism globally,

see W. Honeychurch and C. A. Makarewicz, "The Archaeology of Pastoral Nomadism," *Annual Review of Anthropology* 45 (2016): 341–59.

8 Inv. 8278-1863. W. T. Woodfin, "Epitaphios of Nicholas Eudaimonioiannes," in *Byzantium: Faith and Power (1261–1557)*, ed. H. C. Evans (New York, 2004), 316–17, no. 190.

ceramics), slag (metallurgical waste), and post holes. Direct archaeological evidence for textiles, by contrast, is scant, on account of the organic material involved in its production and the dispersal of its products into the many domestic spaces of everyday life.<sup>9</sup> The use of clay instead of wooden loom weights in antiquity, for example, makes weaving more detectable in the domestic contexts of ancient sites.<sup>10</sup> The main diagnostic evidence for medieval textiles, thus far, is the large vats that would have been used to dye or wash them. Two such installations for the dyeing of woolen, cotton, linen, or silk textiles have been excavated in Thebes by Charikleia Koilakou, both at the edge of the urban settlement, which accords with the prescriptions of the *Hexabiblos*.<sup>11</sup> One of the two, whose construction dates to the late ninth century, was converted into a house after 1035 with a limited reuse of the vats for domestic production.<sup>12</sup> The installations consist of rock-cut vats resembling the oil and wine presses that Demetris Athanasoulis has identified at four monastic sites in the northwestern Peloponnese.<sup>13</sup> Other dyeing works have been excavated in the Peloponnese but date to the classical or Hellenistic period, most notably the dye works at Isthmia excavated by Oscar Broneer in 1954.<sup>14</sup>

9 Cloth is biodegradable and survives only in arid soils, which is why so many of our extant fabrics (ca. 150,000 samples) come from Egypt; see T. K. Thomas, "Coptic and Byzantine Textiles Found in Egypt: Corpora, Collections, and Scholarly Perspectives," in *Egypt in the Byzantine World, 300–700*, ed. R. S. Bagnall (New York, 2007), 137–56. Twelve extremely degraded textile samples excavated in Amorium are the typical of the remains unearthed even with the most careful methods; see P. Linscheid, "Textile Fragments from the Lower City, Trench AB and Trench LC5," in *Amorium Reports II: Research Papers and Technical Reports*, ed. C. S. Lightfoot (Oxford, 2003), 185–91.

10 R. J. Forbes, *Studies in Ancient Technology*, vol. 4, *The Fibres and Fabrics of Antiquity*, 2nd rev. ed. (Leiden, 1964); N. Psaraki-Belesiotti and A. Geroulanou, *Παραδοσιακές καλλιέργειες* (Athens, 1978), 95–119.

11 Constantine Harmenopoulos, *Πρόχειρον Νόμον ἢ Εἰς ἄβιβλος*, ed. K. G. Pitsakis (Athens, 1971), 117.

12 Ch. Koilakou, "Βιοτεχνικές εγκαταστάσεις βυζαντινῆς εποχῆς στη Θήβα," in *Αρχαιολογικά τεκμήρια βιοτεχνικῶν εγκαταστάσεων κατὰ τὴν βυζαντινὴν ἐποχὴ, 5ος–15ος αἰώνας* (Athens, 2004), 223–29.

13 D. Athanasoulis, "Μοναστηριακά πατητήρια στην Ηλεία," in *Οἶνον ιστορώ: Αμπελοοινική ιστορία και αρχαιολογία της ΒΔ Πελοποννήσου*, ed. G. A. Pikoulas (Athens, 2001), 69–78.

14 The dye works are cut out of a hillside at Raches, away from the central area of Isthmia, and date to 360–240 BCE: C. P. Kardara, "Dyeing and Weaving Works at Isthmia," *AJA* 65 (1961): 261–66.

The domestic production of textiles in Roman villas is proved by the survival of looms, but none date from the medieval period.<sup>15</sup> Beyond washing and dyeing, all other aspects of textile production in the postclassical period are unknown. An interesting hypothesis on weaving activities is based on postholes in Cappadocia. Investigating the site of Selime, Jennifer Ball suggests that holes in the domestic floor could have been used to ground two movable pit looms and may date between the eleventh and sixteenth centuries.<sup>16</sup>

Given the evidence provided by pedestrian surface surveys in the Peloponnese (fig. 2), it appears that the intensification of nucleated settlements in the mountains reflects the ecological exploitation of pasture and water energy. The collective data suggest that the establishment of these mountain settlements amounted not to a defensive retreat prompted by a fear of attack, but rather a strategy of deliberate land use. Middle and late Byzantine populations in Greece were directed toward the ecology of mountains in a more significant way than in antiquity.<sup>17</sup> Throughout this period, shepherds and farmers competed over resources in the Mediterranean. During fallow seasons, animals grazed and manured farmers' fields; when arable land was cultivated, pastoral needs were compensated by transhumance. The ideal location for a pastoral village was about five hundred meters above sea level: shepherds could take their flocks to the plains below in winter and to the mountains above during summer.<sup>18</sup> An escalation of herding activities throughout the

15 Loom weights are a standard find in all excavations of rural farmsteads in antiquity. Peloponnesian examples in Patras, Eleia, Lavda, etc., are ample. See M. Petropoulos, "Ἀγροικίες Πατράϊκῆς," in *Structures rurales et sociétés antiques: Actes du colloque de Corfou, 14–16 mai 1992*, ed. P. N. Doukellis and L. G. Mendoni (Paris, 1994), 412–14; J. E. Coleman, *Excavations at Pylos in Elis* (Princeton, NJ, 1986), 139–49.

16 J. Ball, "The Missing Link: Filling the Gap in the Evolution of Medieval Domestic Looms," in *Αναδέματα εορτικά: Studies in Honor of Thomas F. Mathews*, ed. J. D. Alcheres (Mainz, 2009), 38–44.

17 Fernand Braudel theorized the three distinct cultural ecologies of plains, hills, and mountains in *The Mediterranean and the Mediterranean World in the Age of Philip II*, trans. S. Reynolds (Berkeley, CA, 1995).

18 A. T. Grove and O. Rackham, *The Nature of Mediterranean Europe: An Ecological History* (New Haven, CT, 2001), 69–71; T. W. Gallant, *The Edinburgh History of the Greeks, 1768 to 1913: The Long Nineteenth Century* (Edinburgh, 2015), 249–51.



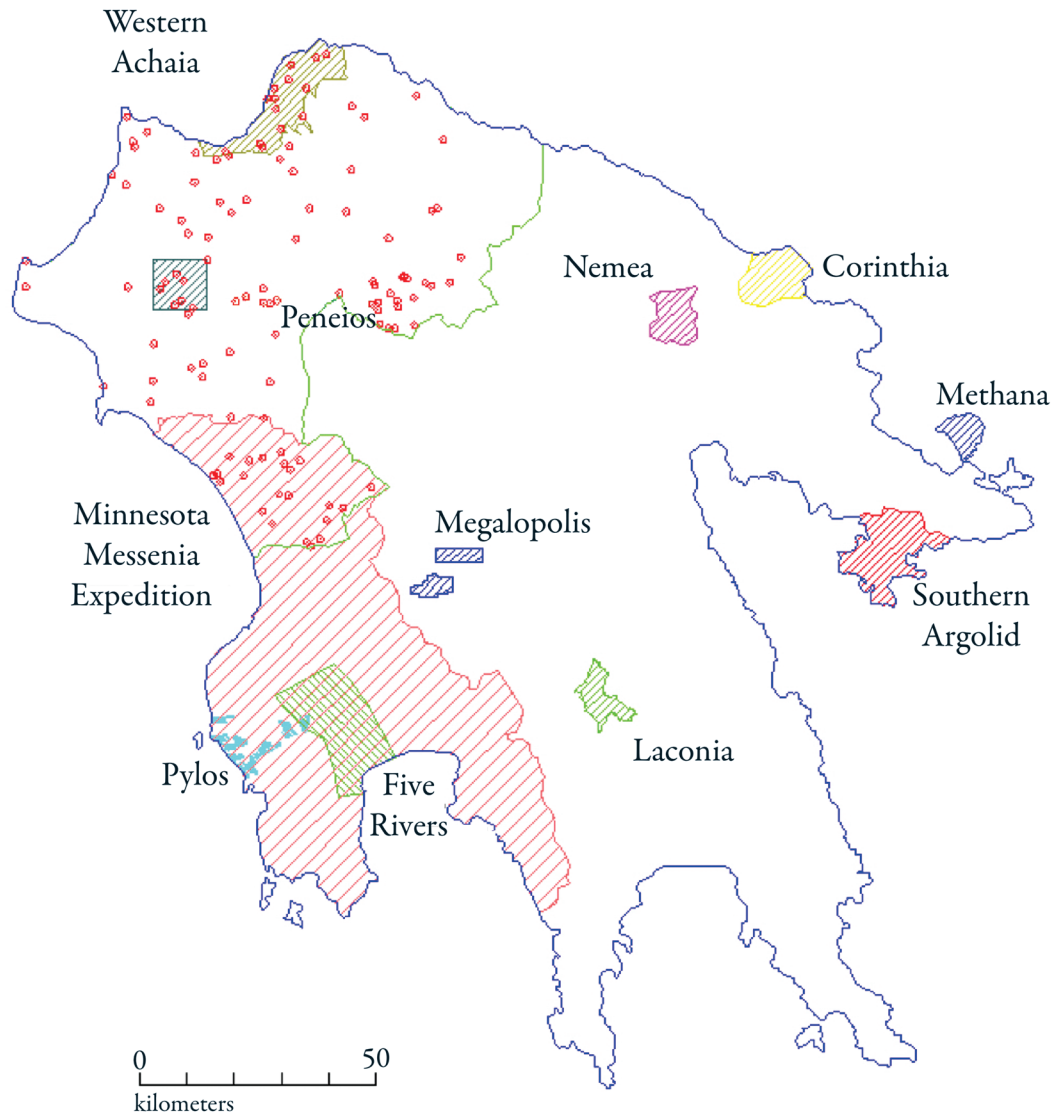


Fig. 2. The Peloponnese. Green outline indicates boundary of Morea Project with medieval sites as red circles. Hatching marks areas of pedestrian surveys. Map by the author.

region left behind a strong imprint in the distribution of settlements.

During the 1960s, the MME documented the nucleation of settlements in the mountainous hinterland of the region. Without the expertise of a medieval ceramicist to analyze the project's pottery, the MME relied on historical sources to explain this nucleation. Historian Peter Topping concluded that it represented a fourteenth-century demographic retreat.<sup>19</sup> *Annales*

School historian Hélène Antoniadis-Bibicou arrived at the same conclusion for deserted villages throughout Greece in her analysis of the textual sources in 1963.<sup>20</sup> The interpretations of both scholars relied on the assumption that habitation in the plains was preferable to the mountains, as was the case in both the ancient and modern periods, repeating older romantic notions that the mountains were simply sites of refuge, retreat, and resistance.

19 P. Topping, "The Post-Classical Documents," in McDonald and Rapp Jr., *Minnesota Messenia Expedition*, 64–80.

20 H. Antoniadis-Bibicou, *Recherches sur les douanes à Byzance: L'"octava", le "kommerkion" et les commerciaires* (Paris, 1963).

The MME's extensive geographical coverage of Messenia did not allow a denser resolution of focus. The MME team selected Nichoria, a ridgetop site near the modern villages of Rizomylos and Karpophora, which they excavated between 1969 and 1975. In addition to uncovering evidence of occupation in antiquity, the project unearthed the remains of a cluster of Byzantine farmhouses. Although the site did not form an extensive village, remains of iron slag and charcoal indicated the exploitation of the hilltop for industrial purposes.<sup>21</sup> The rescue excavations prior to the construction of the Peneios River dam in 1967 also exposed the foundations of a Byzantine farmhouse, which was subsequently excavated.<sup>22</sup> Other than the existence of a hearth and the typical finds of roof tiles and pottery, the precise agrarian activities associated with the house could not be determined. Both excavations, however, affirmed the productive exploitation of the countryside in the medieval period. The Eleia plain, watered by the Peneios River, had been an important center of linen production. The absence of any physical artifacts associated with textiles and the invisibility of manufacturing in stratigraphic contexts highlights the need to devise alternative strategies for textile archaeology.

In 1979, a decade after the study of Messenia, the Southern Argolid Exploration Project improved methods of collection and integrated ethnographic and geological analysis. Observing a similar phenomenon of nucleation, the project revised the theories of social and economic decline. Using geological core samples, it affirmed the sharp increase of husbandry in the medieval Argolid, which must be associated with productive markets and the capitalization of wool. The survey determined that the countryside declined in the Hellenistic and Roman periods (previously considered to be peaks of cultural life), and that the greatest prosperity in the region occurred in the late Roman and early Byzantine periods. Like the new archaeological discoveries in Italy, the Argolid Exploration Project debunked the historical narratives of decline adopted by Edward Gibbon and Enlightenment historians.<sup>23</sup>

21 W. McDonald, W. D. E. Coulson, and J. Rosser, "The Byzantine Occupation," in *Excavations at Nichoria in Southwest Greece*, vol. 3, *Dark Age and Byzantine Occupation* (Minneapolis, 1983), 351–424.

22 Coleman, *Excavations at Pylos*.

23 For a summary of this reappraisal, see R. Hodges and D. B. Whitehouse, *Mohammed, Charlemagne and the Origins of*

Economic growth and an increase in the number of sites occurred between the third and sixth centuries. Some classical or Hellenistic sites were reoccupied, while others were founded. The economic development of the Argolid in early Byzantium is consistent with the scenario of general prosperity that emerges from the archaeological record of the eastern Mediterranean. The Argolid Exploration Project concurred with earlier excavations that all recognizably inhabited sites disappeared between the seventh and ninth centuries. The medieval reinhabiting of the landscape began in the ninth century and continued into the mid-fourteenth century.

The medieval sites shared common characteristics of land use and site distribution. Many new sites consisted of nucleated villages or small hamlets. They were located in the inland valleys of the region, with a noted preference for headwaters rather than seashores. This cautious choice of location indicates a conscious concern for concealment and security. In addition, by incorporating geological core samples in the analysis, the Argolid Exploration Project revealed that activity during the medieval period precipitated soil erosion. New farmers, perhaps not familiar with the methods of soil conservation, were less careful than their late Roman predecessors. They left mudflows, cleared brush, and did not repair terrace walls, all contributing to cumulative soil erosion.<sup>24</sup> The geological evidence for soil erosion also indicates the intensification of sheep and goat husbandry. The concerted analysis of village ecologies in the 1970s led to the discovery of a competitive interdependence between farmers and shepherds.<sup>25</sup> Agriculture in the Peloponnesian hinterland depended on strategies of intensive soil protection in the form of terracing. Freely ranging livestock, in contrast, aggravated erosion by dislodging the plant

*Europe: Archaeology and the Pirenne Thesis* (Ithaca, NY, 1983), 54–76.

24 M. H. Jameson, C. N. Runnels, and T. H. van Andel, *A Greek Countryside: The Southern Argolid from Prehistory to the Present Day* (Stanford, CA, 1994); C. Runnels and T. H. van Andel, "The Evolution of Settlement in the Southern Argolid, Greece: An Economic Explanation," *Hesperia* 56, no. 3 (1987): 303–33; T. H. van Andel, C. Runnels, and K. O. Pope, "Five Thousand Years of Land Use and Abuse," *Hesperia* 55, no. 1 (1986): 103–28.

25 Michael Jameson, the principal investigator of the Argolid Exploration Project, developed methodologies of cultural ecology, a field founded by his colleague Robert Netting, and incorporated anthropology into his research.



life that prevented soil from rolling down the slopes.<sup>26</sup> The increase in nucleated settlements coupled with the deterioration of terraces and soil retention in the Argolid, therefore, indicates an increased dependence on animal husbandry and the trades associated with wool manufacture.

During the eighteenth and early nineteenth centuries, the northwestern Peloponnese was an epicenter of wool manufacture for export. The British traveler William Martin Leake quantified the intensity of wool production in 1805: “about three-fourths of the wool produced in the district is exported, the remainder is wrought at home into coarse cloaks, or into carpeting, or the furniture of beds and sofas.”<sup>27</sup> Illustrations from nineteenth-century travel literature show the domestic use of wool in the iconic Greek shepherd cape, and many such fabrics survive in museum collections (fig. 3). Before the introduction of petroleum-based polymers, wool was the best water-repellent material and in great demand. Working with the Argolid Exploration Project, the anthropologists Harold Koster and Joan Bouza Koster recorded the traditional life-cycle of a Peloponnesian shepherd between 1972 and 1975. For twenty-three months, the Kosters lived with a community of pastoralists in the village of Didyma.<sup>28</sup> Their study resulted in the first ethnographic survey of the social life of a pastoral village and the precise transhumant movement through the landscape. Concentrating on the craft of weaving, Bouza Koster introduced traditional weaving methods in the curriculum of American textile design. In her courses at the Tyler School of Art in Philadelphia, she used a loom constructed by the weavers of Didyma.<sup>29</sup>

26 Grove and Rackham, *Nature of Mediterranean Europe*.

27 W. M. Leake, *Travels in the Morea* (London, 1830), 1:18.

28 H. A. Koster, “The Ecology of Pastoralism in Relation to Changing Patterns of Land Use in the Northeast Peloponnese” (PhD diss., University of Pennsylvania, 1977), 26, 243, 265; idem, “The Thousand Year Road,” *Expedition* 19, no. 1 (1976): 19–28. J. B. Koster, “From Spindle to Loom: Weaving in the Southern Argolid,” *Expedition* 19, no. 1 (1976): 29–39; eadem, “Nobody Weaves Here Anymore?: Hand Textile Production in the Southern Argolid,” in *Contingent Countryside: Settlement, Economy, and Land Use in the Southern Argolid Since 1700*, ed. S. B. Sutton (Stanford, CA, 2000), 290–317.

29 Committed to education and social justice, the Kosters continued their craft-based research as sheep farmers and as teachers at SUNY Broome Community College in upstate New York.



Fig. 3. Wool shepherd cape from the region of Phocis, central Greece. Benaki Museum, Athens. Photograph by the author.

The Liverpool Methana Survey Project (1981–87) complemented the lessons of the Southern Argolid by combining the strategies of surface survey and ethnoarchaeology at the northeast limits of the Peloponnese.<sup>30</sup> The archaeological material from Methana, like that from the Argolid, contradicts the literary sources that describe the seventh to fifteenth centuries as a period of demographic decline and cultural hiatus. The project indicated an abandonment of coastal sites during the seventh century complemented by inland relocation, and an expansion of settlements after the ninth century. Anthropologists Hamish and Mary Forbes followed the ethnoarchaeological model established by the Argolid Exploration Project.<sup>31</sup> Hamish Forbes's foundational volume on archaeological ethnography encapsulated the collaborative lessons of this process and filled a scholarly vacuum, as Harold Koster's dissertation was unfortunately never published.<sup>32</sup> The studies of the Koster and the Forbeses reconstruct in great detail all the stages of wool production in traditional husbandry. Assuming some level of continuity, the traditional methods documented by nineteenth-century travelers and by scholars in the 1970s and 1980s can shed some light on medieval practices.

The British-led Laconia Survey (1983–88) had a distinctive medieval focus, with Pamela Armstrong studying the pottery and Guy Sanders mapping the architectural remains.<sup>33</sup> The first recognizable material from the middle Byzantine period is dated to 900, with an increase in settlements during the last two decades of the eleventh century. In general, Byzantine sites seem to have been nucleated rather than dispersed. With its more advanced expertise in ceramic chronologies, the Laconia Survey was able to refine Byzantine chronologies and argue for a settlement boom preceding the Latin occupation of 1206. The increase in

transhumance and pastoralism coincides with the maintenance of road systems and bridges. The Laconia Survey connected the maintenance of a bridge with three documented settlements.<sup>34</sup>

The Eastern Korinthia Archaeological Survey (EKAS) (1997–2003) was directed by Timothy Gregory of the Ohio State University—the first Byzantinist to lead such a project—who succeeded in fine-tuning the developmental sequence of hamlets and villages in the Korinthia. The project was innovative in its theory of artifact collection and analysis, and generated additional field projects in Kythera and Cyprus.<sup>35</sup> It outlined two distinct archaeological profiles: on the one hand, that of the early middle-Byzantine period, and on the other, that of the late middle-Byzantine and late Byzantine periods. Accordingly, the settlement pattern of the middle Byzantine recovery of the ninth century featured small, dispersed hamlets, which were abandoned for centralized nucleated villages in the twelfth and thirteenth centuries.<sup>36</sup> Targeted explorations at Isthmia and Agios Vasilios tested the broader regional perspective on specific settlements.<sup>37</sup> Lita Gregory carried out ethnographic research with a focus on cemeteries, processes of abandonment, and cultural resource management.<sup>38</sup>

30 C. Mee and H. Forbes, eds., *A Rough and Rocky Place: The Landscape and Settlement History of the Methana Peninsula, Greece* (Liverpool, 1997).

31 H. A. Forbes, "Turkish and Modern Methana," in Mee and Forbes, *Rough and Rocky Place*, 101–17; idem, "The Agrarian Economy of the Ermionidha around 1700: An Ethnohistorical Reconstruction," in Sutton, *Contingent Countryside*, 41–70.

32 H. A. Forbes, *Meaning and Identity in a Greek Landscape: An Archaeological Ethnography* (Cambridge, 2007).

33 W. Cavanagh, J. Crouwel, R. W. V. Catling, and G. Shipley, eds., *The Laconia Survey: Continuity and Change in a Greek Rural Landscape* (London, 1996–2002).

34 P. Armstrong, W. G. Cavanagh, and G. Shipley, "Crossing the River: Observations on Routes and Bridges in Laconia from the Archaic to Byzantine Periods," *BSA* 87 (1992): 300.

35 T. F. Tartaron et al., "The Eastern Korinthia Archaeological Survey: Integrated Methods for a Dynamic Landscape," *Hesperia* 75, no. 4 (2006): 453–523.

36 T. E. Gregory, "People and Settlements of the Northeastern Peloponnese in the Late Middle Ages: An Archaeological Exploration," in *Viewing the Morea: Land and People in the Late Medieval Peloponnese*, ed. S. E. J. Gerstel (Washington, DC, 2013), 277–308.

37 J. L. Rife, *The Roman and Byzantine Graves and Human Remains* (Princeton, NJ, 2012); P. N. Kardulias, T. E. Gregory, and M. A. Dann, "Re-creating a Frankish Town: A Fourteenth-Century Settlement in Southern Greece is Reborn Using Computer Imaging," *Archaeology* 50 (1997): 54–58.

38 L. Tzortzopoulou-Gregory, "Remembering and Forgetting: The Relationship Between Memory and the Abandonment of Graves in Nineteenth- and Twentieth-Century Greek Cemeteries," in "The Abandoned Countryside: (Re)Settlement in the Archaeological Narrative of Post-Classical Greece," ed. K. Kourelis and W. R. Caraher, special issue, *The International Journal of Historical Archaeology* 14, no. 2 (2010): 285–301; eadem, "Coevolution of Environment and Culture in the 21st Century: The Impact of Modern Development and the Role of Cultural Resource



The Nemea Valley Archaeological Project (NVAP) (1984–87) documented intensive settlement and land use between the twelfth and fourteenth centuries.<sup>39</sup> Of the various sites involved in the survey, the greatest number of components date to the Byzantine period, followed by the classical and Roman periods.<sup>40</sup> The medieval sites indicate continuous inhabitation throughout the Byzantine and Frankish periods. Effie Athanassopoulos, who studied the medieval remains, concluded that the eleventh, twelfth, and thirteenth centuries constituted a period of prosperity with an increasing number of dispersed settlements. For the late thirteenth and fourteenth centuries, there is evidence of decline: in this period the dispersed settlements were replaced by the single, nucleated hilltop town of Polyphengi.<sup>41</sup> Like the Southern Argolid and Methana surveys, the NVAP deployed ethnoarchaeology to understand living practices. Susan Sutton's ethnography of Nemea complemented the collaborative work of the Kosters, the Forbeses, and the Gregorys in adjacent regions.<sup>42</sup> Athanassopoulos's parallel study of the Byzantine settlement patterns complements this ethnographic work, while also integrating the surface pottery with the excavations of the medieval village at the Sanctuary of Zeus.<sup>43</sup> The MME, Argolid Exploration Project, Methana Survey Project, EKAS, and NVAP are only five of over twenty surface surveys carried out

in Greece during the last half century. Their targeted approach to the medieval period and their processual approach to ethnoarchaeology established a model for other surveys in the Peloponnese at Patras,<sup>44</sup> Pylos,<sup>45</sup> Geraki,<sup>46</sup> Lavda, Astros,<sup>47</sup> Sikyon,<sup>48</sup> and Kleonai.<sup>49</sup>

As in most major shifts of settlement patterns, multiple forces contributed to the nucleation of settlements during the middle and late Byzantine period. Feudalization and defensive strategies had a significant impact, but the intensification of husbandry seems to have been important in the process of site selection. The Minnesota Archaeological Researches in the Western Peloponnese continued the MME's investigative tradition in the field of architecture. The Morea Project (1990–2002)—which I codirected with Frederick Cooper, Helen Foster, Joseph Alcherms, and Mary Coulton—surveyed all visible medieval villages in the provinces of Achaia and Eleia as part of a broader diachronic survey of vernacular architecture. The village survey produced evidence for the production of wool and revealed the architectural framework within which domestic production took place.<sup>50</sup> The Morea Project contextualized the medieval villages within a larger horizon of rural settlement from the twelfth to the twentieth century that included the survey of three thousand modern houses. I investigated 125 medieval settlements within the study area, surveying the extant remains of eight settlements containing a total of eight

Management (CRM) in Greece,” in *Medieval and Post-Medieval Greece: The Corfu Papers*, ed. J. Bintliff and H. Stöger (Oxford, 2009), 251–58.

39 J. C. Wright, J. F. Cherry, J. L. Davis, E. Mantzourani, S. B. Sutton, and R. F. Sutton, “The Nemea Valley Archaeological Project: A Preliminary Report,” *Hesperia* 59, no. 4 (1990): 616–17, 644–45.

40 See John Cherry's bar graph in *ibid.*, 617, fig. 11.

41 E. Athanassopoulos, *Landscape Archaeology and the Medieval Countryside* (Princeton, NJ, 2016); *eadem*, “Landscape Archaeology of Medieval and Pre-Modern Greece: The Case of Nemea,” in *Aegean Strategies: Studies of Culture and Environment on the European Fringe*, ed. P. N. Kardulias and M. T. Shutes (Lanham, MD, 1997), 79–105.

42 S. B. Sutton, “What Is a ‘Village’ in a Nation of Migrants?,” *Journal of Modern Greek Studies* 6, no. 2 (1988): 187–215; *eadem*, “Crumbling Walls and Bare Foundations: The Process of Housing in Greece,” in *Constructed Meaning: Form and Process in Greek Architecture*, ed. E. Pavlides and S. B. Sutton (Minneapolis, 1995), 319–44.

43 Athanassopoulos, *Landscape Archaeology*; E. Athanassopoulos and K. Shelton, “The Medieval Deposits from the Sanctuary of Zeus at Nemea, Southern Greece” (paper presented at 11th Congress AIECM3 on Medieval and Modern Period Mediterranean Ceramics, Antalya, Turkey, October 19–24, 2015).

44 C. G. Makrypoulas, K. Varalexi, and A. Koskinas, “History, Archaeology, and Medieval Greece: A Case Study from Western Achaia” (paper presented at the conference *Νέες προσεγγίσεις στη μεσαιωνική και νεότερη Ελλάδα*, Corfu, Greece, May 1–3, 1998).

45 S. E. J. Gerstel, “Medieval Messenia,” in *Sandy Pylos: An Archaeological History from Nestor to Navarino*, ed. J. L. Davis (Austin, TX, 1998), 210–42.

46 A.-M. Simatou and R. Christodouloupoulou, “Παρατηρήσεις στον μεσαιωνικό οικισμό του Γερακίου,” *ΔΧΑΕ* 15 (1989–90): 67–88.

47 Y. C. Goester, “The Plain of Astros: A Survey,” *Pharos* 1 (1993): 39–112; *eadem*, “The Landscape of Lavda,” *Pharos* 1 (1993): 201–8.

48 Y. Lolos, *Land of Sikyon: Archaeology and History of a Greek City-State* (Princeton, NJ, 2011); Y. Lolos, B. Gourley, and D. R. Stewart, “The Sikyon Survey Project: A Blueprint for Urban Survey?,” *JMA* 20, no. 2 (2007): 267–96.

49 J. C. Marchand, “Kleonai, the Corinth–Argos Road, and the ‘Axis of History,’” *Hesperia* 78, no. 1 (2009): 107–63.

50 K. Kourelis, “Medieval Settlements” and “Catalogue of Citadels,” in *Houses of the Morea: Vernacular Architecture of the Northwest Peloponnese (1205–1955)*, ed. F. A. Cooper (Athens, 2002), 52–61, 62–79.

Fig. 4.  
View of the medieval  
village of Kastro tis Orias  
in Eleia, Peloponnese.  
Photograph by the author.



hundred houses.<sup>51</sup> The medieval settlements were located, on average, five hundred meters above sea level, halfway between the valleys below and the mountains above (fig. 4). This intermediary location allowed for seasonal transhumance to the plains during the winter and to the forests during the summer. Through terracing, each village could produce sufficient grains for their

consumption within a day's walk from the village. The herding of sheep and goats, however, required longer journeys that lasted many days. Seasonal huts accommodated the winter and summer pastures accordingly.

The villages were established at locations that maximized the potential energy of water from natural springs. Rushing down the steeply inclined slopes, the water provided energy for milling grain and fulling wool. The preparation of wool requires water for cleaning the raw material and strengthening its waterproof qualities. The ethnoarchaeologists of the Southern

51 Cooper, *Houses of the Morea*; K. Kourelis, "Monuments of Rural Archaeology: Medieval Settlements in the Northwestern Peloponnese" (PhD diss., University of Pennsylvania, 2003).



Argolid Exploration Project recorded fulling practices surviving into the 1970s. A line of interconnected wooden barrels collected the water at its source and channeled it into a rapid waterfall. Mill runs and channels from the medieval settlement of Kastro tis Orias illustrate the harnessing of water energy for that purpose (fig. 5).<sup>52</sup> Such installations were in place through the late medieval period. A surviving seventeenth-century fulling mill in Demetsana has been restored as part of the installations of the Open-Air Water Power Museum there.<sup>53</sup> No medieval fulling mill has been excavated in Greece, however.

In addition to maximizing natural water energy, the medieval hilltop settlements of the Morea afforded visual connectivity through the valleys, enhanced by a small tower at the center or peak of each village. Mapping the visual vantage points from village to village demonstrates the connectivity that existed between the coast and the tallest mountains. Although it certainly had defensive benefits, this visual network also helped shepherds to maintain control over pasturelands in the distant commons. Ethnoarchaeologists have demonstrated that the pastoral landscape was connected not only visually but also through the audible register of bells hanging around the necks of the animals.<sup>54</sup>

The medieval shepherd villages of the Peloponnese ranged in size from fifteen to three hundred houses (fig. 6). All houses share a common typology. They are modular spaces about five meters in width that extend longitudinally down the slope in units of ten to thirty meters in length (fig. 7).<sup>55</sup> Constructed by dry-wall masonry using locally quarried stones, the houses are

organized along terraces. Sunken into the limestone, each domestic space contains at least two contiguous levels under one roof. The lower level would have been used for domesticated animals. Sheep, goats, and humans would have lived under the same roof, as was the case in medieval “unitary houses” throughout Europe.<sup>56</sup> Particularly during the cold winter months, cohabitation with livestock formed an important component of passive heating that utilized the animals for their body heat.<sup>57</sup>

Although wool has not been excavated in the medieval settlements of the northwestern Peloponnese, it is clear that the very existence of these new villages depended upon the pastoral necessities of wool manufacture. The villages were sited in locations that facilitated herding sheep and processing wool. Each structure, moreover, would house not only domestic textile production but the very raw material of the industry, the animals.

If we take the liberty of projecting the ethnographic data collected during the nineteenth and twentieth centuries back into the Middle Ages, we might even challenge certain assumptions about gender and domestic industries.<sup>58</sup> Forbes’s fieldwork in Methana determined that shepherds were not predominantly male; on the contrary, “tending these animals [sheep and goats] was traditionally considered primarily women’s work.”<sup>59</sup> Families with more daughters kept more animals. Girls from different families congregated in the same grazing space, creating a feminine space of play and socialization. The animals that became part of dowries upon marriage were typically the animals that the brides themselves cared for.

52 Koster, “From Spindle to Loom.”

53 A. Bakourou, “Δημητσάνα,” *ΑρχΔ* 43, Β’Ι (1988 [1993]): 138–39; S. Papadopoulos and A. Louvi, eds., *The Open-Air Water Power Museum* (Athens, 1997). This was the second pioneering museum of the Piraeus Bank Group Cultural Foundation, which now includes seven museums throughout Greece: the Silk Museum in Soufli; the Open-Air Water Power Museum in Demetsana, Arkadia; the Museum of the Olive and Greek Olive Oil in Sparta; the Museum of Industrial Olive-Oil Production of Lesvos in Aghia Paraskevi; the Rooftile and Brickworks Museum N. & S. Tsalapatas in Volos; the Museum of Marble Crafts in Pyrgos, Tinos; and the Environment Museum of Strymonia in Korinthia.

54 P. Panopoulos, “Animal Bells as Symbols: Sound and Hearing in a Greek Island Village,” *Journal of the Royal Anthropological Institute* 9, no. 4 (2003): 639–56.

55 K. Kourelis, “The Rural House in the Medieval Peloponnese: An Archaeological Reassessment of Byzantine Domestic Architecture,” in

*Archaeology in Architecture: Studies in Honor of Cecil L. Striker*, ed. J. J. Emerick and D. Deliyannis (Mainz, 2005), 119–29.

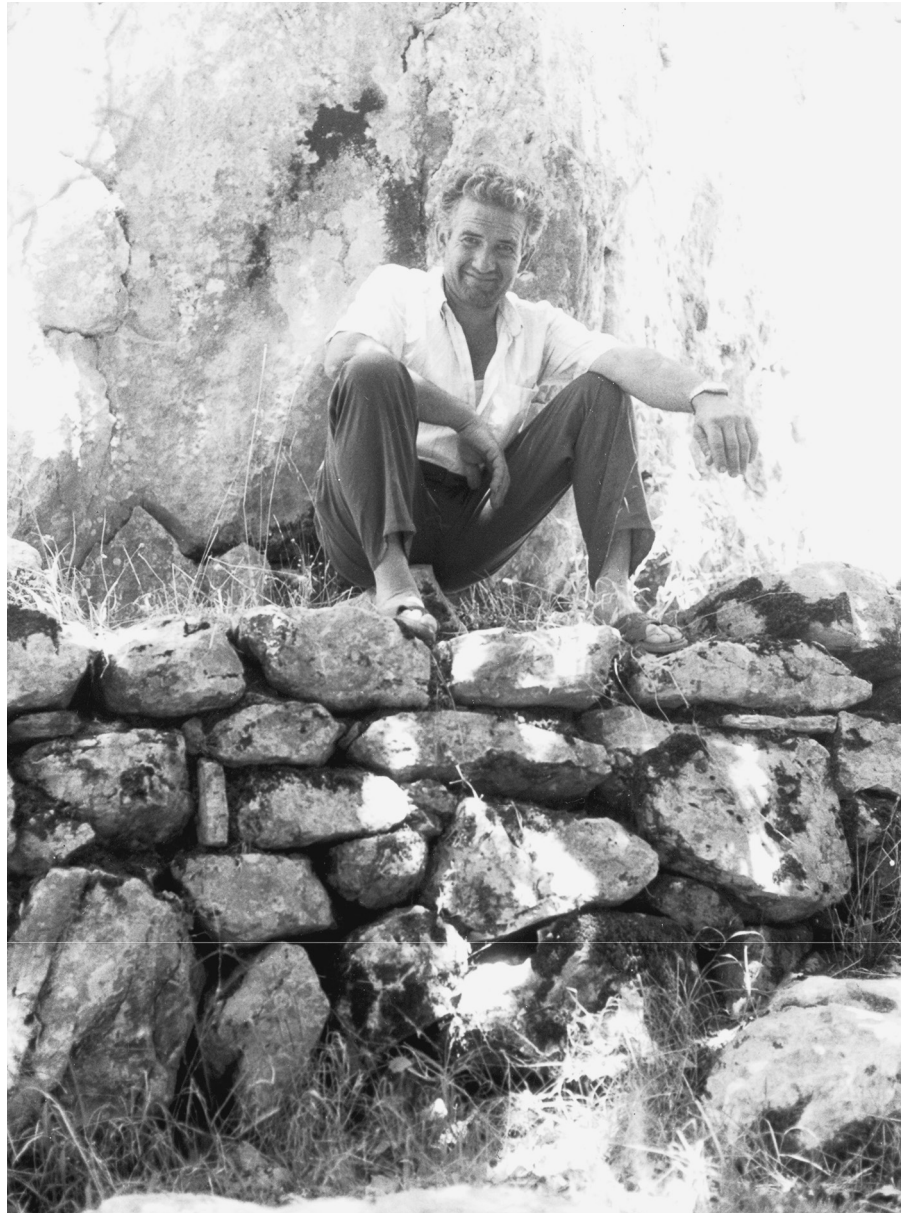
56 J. Chapelot and R. Fossier, *The Village and House in the Middle Ages*, trans. H. Cleere (Berkeley, CA, 1985), 243–44.

57 This practice continued into the early modern period. Animals and humans were segregated into two different levels during the nineteenth century but separated only by wooden boards.

58 Anthropologists have explored the gender imbalance of agrarian Greek life: see the essays in J. Dubisch, ed., *Gender and Power in Rural Greece* (Princeton, NJ, 1986); for the differences between western medieval and Byzantine women according to textual evidence, see A. E. Laiou, *Gender, Society and Economic Life in Byzantium* (Aldershot, UK, 1992).

59 Forbes, *Meaning and Identity*, 79.

Fig. 5.  
Medieval mill run (and the  
contemporary shepherd  
Chrystos), Kastro tis Orias  
in Eleia, Peloponnese.  
Photograph by the author.



Similarly, assumptions about gender and architectural labor should be questioned. As mentioned above, the houses of the medieval villages of the rural Morea were built with stones quarried locally and set without mortar. The wood used for trussing the roof was not milled, but hand-carved logs cut from the nearby forest. Not built for permanence, like the churches, these medieval houses do not survive above their foundation course. Like the maintenance of field walls and terraces of the same masonry type, and unlike the more elaborate Byzantine churches, houses did not require the

expertise of a mason; they were built and repaired communally by laborers that included women.<sup>60</sup> Operating

60 For a global perspective of communal architecture, see P. Oliver, *Dwellings: The Vernacular House World Wide* (London, 2003), and idem, ed., *Encyclopedia of Vernacular Architecture of the World* (Cambridge, 1997). The emergence of a specialized mortared architecture for houses in the eighteenth century required itinerant masons. This new class of masons originated from villages in Epirus with limited agricultural production. Traveling during spring and summer, these masons were exclusively male. Ch. G. Konstantopoulos, *Η μαθητεία στις κομπανίες των χτιστών*



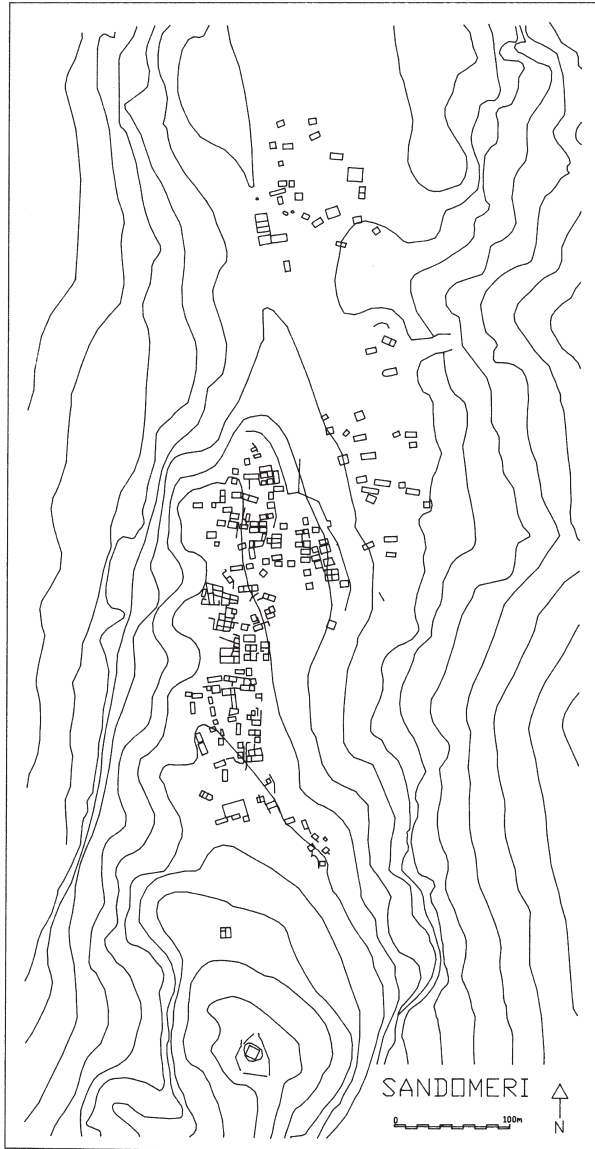


Fig. 6. Ground plan of the medieval village of Sandomeri in Achaia, Peloponnese. Drawing by the author.

as a family unit, men, women, and children would have participated in the making of both rubble walls and woolen textiles. Women since antiquity have undoubtedly been the main laborers of spinning thread and

της Πελοποννήσου (Athens, 1987). According to the oral interviews conducted by the Morea Project, the majority of masons came originally from Epirus and then from the village of Langadia: Cooper, *Houses of the Morea*, 138.

weaving textiles in domestic quarters. Preceding the spinning and weaving, however, the herding of sheep and goats and the shearing, washing, and fulling of wool were less gendered. As Robert Blair St. George noted with regard to seventeenth-century New England, the lack of craft specialization (building versus textile) in premodern communities assured social cohesion and autonomy.<sup>61</sup> Robert Netting, the founder of the anthropological field of cultural ecology, explored the interworkings of small agrarian communities, or small-holdings, and argued for their unique resilience.<sup>62</sup>

The notion of communal self-sufficiency in the production of textiles is also articulated in the writings of Plethon, a Neoplatonist scholar and magistrate of the Despotate of Mistra. Reflecting on the survival of the Byzantine Empire in a 1415 oration to Emperor Manuel II, Plethon argued that the local Peloponnesian production of woolens, flax, silk, and cotton would lead to self-reliance and a healthier polity.<sup>63</sup> Florence's political and economic ascendancy was built on wool manufacture, leading ultimately to the cultural phenomenon of the Renaissance. Plethon indirectly refers to the economic threat from Florence ("beyond the Ionian Sea"), which imported wool from England ("from the Atlantic Ocean") and processed it in its factories. Plethon's friend, Cardinal Basilios Bessarion, noted the technological advances that Florence was making and investigated the more efficient use of water energy in 1444. In a letter to Constantine XI Palaiologos, then Despot of Mistra, Bessarion warned that the Peloponnese was lagging behind the West in textile technologies, and urged him to incorporate the innovations that he had

61 R. B. St. George, "'Set Thine House in Order': The Domestication of the Yeomanry in Seventeenth-Century New England," in *Common Places: Readings in American Vernacular Architecture*, ed. D. Upton and J. M. Vlach (Athens, GA, 1986), 336–64.

62 R. M. Netting, *Cultural Ecology* (Menlo Park, CA, 1977); idem, *Balancing on an Alp: Ecological Change and Continuity in a Swiss Mountain Community* (Cambridge, 1981). Netting's best-known subject of study, an Alpine community in Switzerland, is far from the mountainous communities in the Peloponnese, but his influence on Michael Jameson is evident. Jameson and Netting both taught at the University of Pennsylvania, where the Argolid Exploration Project was founded (before moving to Stanford University); Jameson, Runnels, and van Andel, *A Greek Countryside*.

63 PG 160:837A; C. M. Woodhouse, *George Gemistos Plethon: The Last of the Hellenes* (Oxford, 1986), 106.



Fig. 7. Remains of a medieval house from Sandomeri in Achaia, Peloponnese. Photograph by the author.

observed through Italy, France, and the Netherlands.<sup>64</sup> One such advancement was the fulling mill, a wooden contraption that mechanically beats fabrics. References to fulling mills appear in Tuscany as early as 983. Certainly by the thirteenth century, they had become a standard feature in France. Lynn White has argued that the western Middle Ages would not have been possible without advancements in mill technology.<sup>65</sup> The significance of mills for the economy of Mistra is marked in no less conspicuous place than an inscription at the Monastery of Vrontochi. The monastery owned a mill in Moundritsa, a village around eighty-five kilometers to the northwest. The institution's ownership of the mill was sanctioned by a 1322 imperial chrysobull,

which was then carved on the marble columns of the *katholikon* at Vrontochi.<sup>66</sup>

Although few middle Byzantine mills survive, they are frequently listed in textual sources as a standard feature of any village or estate.<sup>67</sup> Regulations regarding mills are found in the Farmer's Law.<sup>68</sup> Eustathios Boilas, an eleventh-century magnate, lists a watermill as the third most important building foundation after the house and the church.<sup>69</sup> The Cadaster

64 A. G. Keller, "A Byzantine Admirer of 'Western' Progress: Cardinal Bessarion," *Cambridge Historical Journal* 11 (1955): 343–48.

65 L. T. White, *Medieval Technology and Social Change* (Oxford, 1962), 79–134.

66 G. Millet, "Inscriptions byzantines de Mistra," *BCH* 23 (1899): 115–18. The medieval village of Moundritsa was investigated by the Morea Project. It was located at Mikro Kastro near the village of Graika. The village was burned in 1826 and offers no physical remains for inspection. Kourelis, "Monuments of Rural Archaeology," 274, site no. 32.

67 J. L. Teall, "The Byzantine Agricultural Tradition," *DOP* 25 (1971): 52.

68 W. Ashburner, "The Farmer's Law," *JHS* 30 (1910): 107–8.

69 S. Vryonis, "The Will of a Provincial Magnate, Eustathios Boilas (1059)," *DOP* 11 (1957): 266: "I built my house and the holy



of Thebes also makes reference to no fewer than eight mills owned by villagers.<sup>70</sup> Moreover, the cadaster uses topographic vocabulary that shows the abundance of mountainous agricultural land and its advantageous relation to rivers and mills. In describing, for example, a field called Chastianos, the document reads, “it begins in the narrow places where Mount Selianon begins, it runs by the river and descends to the hill opposite Zonatos’s mill.” Another mill, in Keramia village, is described as belonging to lands “above the great river,” which suggests a prime location at the head of the river, taking advantage of the streams.<sup>71</sup>

Due to the destructive nature of water, very little survives from pre-seventeenth-century watermills. The archaeology of Byzantine mills is in its infancy, with most of the dated examples coming from northern Greece. For example, two watermills in Thessalonike have been securely dated to the fourteenth century. Watermills dating as early as the sixteenth century have been documented in the northwestern Peloponnese. The Laconia Survey has recorded two mills dating from the middle Byzantine to Ottoman period.<sup>72</sup> In the northwestern Peloponnese, the mill of Marina Maritsa dates to the eighteenth century, although it may have had a preceding phase.<sup>73</sup> For the medieval Peloponnese, the archaeology of mills is especially important vis-à-vis fulling mills. The Open-Air Water Power Museum in Demetsana has restored an ensemble of watermills belonging to Aimyalon Monastery, including mills for grain, wool, skins, and gunpowder. The museum’s investigation and restoration highlights the proximity and technological relationship between fulling and other types of mills in the Greek countryside. Although not dated to the Byzantine period, it provides

a hypothetical reconstruction of the Byzantine fulling mills mentioned by Plethon and Bessarion.

## Textual Evidence

Historians have examined an important shift in the geopolitics of the Byzantine Empire during the eleventh and twelfth centuries, when the provinces overtook the capital in productivity and organization.<sup>74</sup> All textual evidence points toward economic growth throughout the urban centers of the Peloponnese occurring as early as the ninth century. Along with Corinth, Athens, and Thebes, Patras flourished as a major provincial city in the newly formed Theme of Hellas and Peloponnesos during the twelfth century. The Latin Crusader state of the Morea created its “triangle of power” in Eleia, giving the northwestern Peloponnese an additional boost of economic prosperity after 1206.<sup>75</sup> Manolis Chatzidakis’s statistical analysis of wall frescoes in southern Greece shows a greater number of works executed during the Frankish period than either the preceding or the succeeding period.<sup>76</sup> Urban prosperity led to the greater exploitation of the countryside for the accumulation of basic foodstuffs to support growing populations, if not also for the manufacturing of exportable goods. The historical record offers scant glimpses of economic activity in the northwestern Peloponnese and its involvement in the production of fabrics. Placed in the context of corroborating archaeological evidence, the texts highlight the production of woolen, linen, and silk fabrics.

The *Vita Basilii* (Life of Emperor Basil I) is one of the few sources that describes the reconquest of the northwestern Peloponnese through the story of Danelis, who seems to have been the widow of an important landowner.<sup>77</sup> According to the *Vita*, Basil

temple from the foundations, and [I created] meadows, parks, vineyards, gardens, aqueducts, small farms, water mills, and [I brought] animals for use, both necessary and useful.”

70 N. G. Svoronos, “Recherches sur le cadastre byzantin et la fiscalité aux XI<sup>e</sup> et XII<sup>e</sup> siècles: Le cadastre de Thèbes,” *BCH* 83 (1957), reprinted in *Études sur l’organisation intérieure, la société et l’économie de l’Empire Byzantin* (London, 1973), 12–14.

71 *Ibid.*, 11–12.

72 G. Shipley, “Catalogue of Sites,” in Cavanagh et al., *Laconia Survey*, 2:352–53, 375–77, figs. 2.4.22, 2.4.35, sites G522 and K204 (surveyed by G. D. R. Sanders).

73 Kourelis, “Monuments of Rural Archaeology,” 487, fig. 108, site no. 107.

74 A. P. Kazhdan and A. Wharton Epstein, *Change in Byzantine Culture in the Eleventh and Twelfth Centuries* (Berkeley, CA, 1985), 31–56; J. Herrin, “Realities of Byzantine Provincial Government: Hellas and Peloponnesos, 1180–1205,” *DOP* 29 (1975): 255–87.

75 D. Athanasoulis, “The Triangle of Power: Building Projects in the Metropolitan Area of the Crusader Principality of the Morea,” in Gerstel, *Viewing the Morea*, 111–51.

76 M. Chatzidakis, “Η μνημειακή ζωγραφική στην Ελλάδα: Ποσοτικές προσεγγίσεις,” *ΠΛΑ* 56 (1981): 386.

77 I. Bekker, ed., *Theophanes Continuatus: Ioannes Cameniata, Symeon Magister, Georgius monachus* (Bonn, 1838), 5:73–76, pp. 316–20; I. Ševčenko, ed. *Chronographiae quae Theophanis Continuati*



passed through Patras around 850, where a local monk prophesied his future ascent to the throne. Recognizing Basil's potential, Danelis sought honors and spiritual favors that would ensure her future privileges. She made Basil her son's spiritual father, an act that paid off when her son was appointed *protospatharios*. When Basil became emperor, Danelis traveled to Constantinople and brought him elaborate gifts. Danelis must have crossed the Gulf of Corinth by boat, but the rest of her travel was reportedly done on foot with "teams of ten men each lifting her couch in turns."<sup>78</sup> The version of the *Vita* found in the twelfth-century manuscript known as the Madrid Skylitzes includes an illumination depicting her journey. Carried by eight slaves (rather than ten, as the *Vita* relates), she is shown sitting on a litter of ornate fabric upholstery (fig. 8).<sup>79</sup> The text pays great attention to the rich array of gifts Danelis brought to Constantinople, which included slaves, vessels of gold and silver, and locally produced linen and woolen fabrics. The story is puzzling not only because of Danelis's social status as a woman, but also because her economic power seems unusual for this period. She is said to control "not a small part of the Peloponnese as her personal property" only forty-five years after the establishment of imperial authority, but two centuries before great landowners (archons) consolidated political power in the Byzantine provinces.<sup>80</sup> Most likely, Danelis's property came from land granted to a military official after the reconquest of Patras. Under such a scenario, Danelis's deceased husband would have been a veteran or, in the terminology of Niketas Choniates, a budding *thematikos* archon.<sup>81</sup>

*nomine fertur Liber quo Vita Basilii Imperatoris amplexitur* (Berlin, 2011), 255–63.

78 Bekker, *Theophanes Continuatus*, 5.74.15–16; Ševčenko, *Chronographiae*, 255.

79 *L'illustration du manuscrit de Skylitzès de la Bibliothèque Nationale de Madrid*, ed. A. Grabar and M. Manousakas (Venice, 1979), fig. 110, pl. XIX. The Madrid Skylitzes dates to 1130–50 and is the most impressive manuscript produced in Byzantine southern Italy; see E. Boeck, *Imagining the Byzantine Past: The Perception of History in the Illustrated Manuscripts of Skylitzes and Manasses* (Cambridge, 2015).

80 Bekker, *Theophanes Continuatus*, 5.74.15–16; Ševčenko, *Chronographiae*, 255.

81 K. Amantos, *Ιστορία του βυζαντινού κράτους* (Athens, 1939–47), 2:26.

Some scholars have argued that Danelis's story is entirely fictional, while others have attempted to extract elements of truth.<sup>82</sup> We might interpret the story of Danelis's lavish gifts to Basil as an example of imperial propaganda, a metaphorical offering of goods from a province to the capital. In this sense, Danelis can be read as a personification of Patras, which presents elaborate fabrics to the imperial court. The north-western Peloponnese was famous in antiquity for its flax, and there is much evidence for a flourishing fabric industry in the thirteenth century. The diachronic prestige of fabric manufacturing in the region suggests that there may be some truth to this potentially fictional event.

In fact, the textile gifts that Danelis presents to Basil are more prominent in the text, and described in far greater detail, than the precious metalwork:

She also brought with her precious gifts, such as almost no foreign ruler had hitherto brought before an emperor of the Romans. Thus, <the gifts> comprised five hundred household servants. . . . There were also one hundred female *skiastriai* [shade bearers] and richly variegated Sidonian fabrics that are now called *sendais*, their name seemingly having been corrupted through the ignorance of the many; one hundred *linomalōtaria* (for it is best to use common speech in referring to them); two hundred fine linen *amalia*, and other fabrics more delicate than a spider's web, each of which was inserted into a reed tube, their number being one hundred as well; and many and diverse costly vessels of silver and gold.<sup>83</sup>

One of the most interesting features of Danelis's gifts not noted in scholarship is the explicit marking of a textile typology contrasting wool (*mallion*) and linen (*lina*). The list of goods mentioned in the text includes "Sidonian" textiles, not literally imported from Sidon but of fine linen material akin to muslin, for which Sidon

82 S. Runciman, "The Widow Danelis," in *Études dédiées à la mémoire d'André M. Andreadès*, ed. K. Varvaressos (Athens, 1940), 425–31, reviewed by F. Dölger in *BZ* 41 (1941): 254.

83 Bekker, *Theophanes Continuatus*, 5.74.21–37; Ševčenko, *Chronographiae*, 256–57.



Fig. 8. Danelis being carried by her slaves to Constantinople, from the Madrid Skylitzes, twelfth century. Madrid, Biblioteca Nacional de España, Gr. Vitr. 26-2, fol. 102a. Artwork in the public domain; photograph by Cplakidas / Wikimedia Commons.

was known.<sup>84</sup> Next come the “linen-wool” (*linomal-[l]otaria*) textiles, which would have included both those materials in their manufacture; since *mallotarion* signifies a sheepskin rug, the objects described may be linen-wool rugs.<sup>85</sup> Then come “wool-free” linen (*amalia lina*) clothes. Finally, the “fabrics more delicate than a spider’s web” rolled into reed tubes could refer to any kind of delicately embroidered handicraft. A joke referencing sheep is made within the same passage, when

the author comments on the large number of eunuchs among Danelis’s slave gifts: “for this powerful and wealthy old woman apparently knew that there is always room for these castrates in the imperial palace, and that they dwell there in numbers exceeding those of flies in a sheepfold in springtime.”<sup>86</sup> Although a colloquial expression, the reference to sheepfolds (*probaton sekon*) visually places Danelis in a pastoral environment.

References to fabrics in the *Vita Basilii* continue after Danelis’s return to Patras. Around 880, Basil built a new church in the imperial palace. Known

84 Σινδών typically refers to fine cloth, usually linen, or anything made of such cloth: LSJ, s.v. “σινδών.”

85 G. W. H. Lampe, *A Patristic Greek Lexicon* (Oxford, 1961), s.v. “μαλλωτάριον.”

86 Bekker, *Theophanes Continuatus*, 5.74.28; Ševčenko, *Chronographiae*, 257.



as Nea Ekklesia, the “New Church,” it was one of the most influential middle Byzantine buildings in Constantinople.<sup>87</sup> According to the *Vita*, Danelis requested the dimensions of the building and commissioned an enormous carpet of sheep fleece (*nako-tapetas*) sized to fit the church:<sup>88</sup> “The woman Danelis took the measurements of that temple’s interior and had large woolen carpets woven and sent, of the sort that among us are called by a name signifying prayer. They were worthy of marvel on account of both their large size and beauty and were to cover the whole floor, whose variety of rare stones, set next to each other like well-fitted mosaic cubes, imitated the beauty and the variegated colors of the peacock.”<sup>89</sup> Although the Nea Ekklesia does not survive, it can be reconstructed from the text’s ekphrasis. Among the descriptions of the church’s gold and rich marbles, the text notes, “as for the pavement, it first will appear to be fully spread with <rugs> woven of silk or with Sidonian fabrics,” another reference to Danelis’s gift from Patras.<sup>90</sup>

The detailed description of the materiality of Danelis’s textile gifts could be interpreted as a literary trope of imperial gift exchange. At the same time, however, their materiality could refer to geographic realities of production. The insistent differentiation between linen and wool contains an ideological message pertaining to imperial control over two contrasting ecologies, the plains of flax production and the mountains of wool production. The many regional surveys carried out in the Peloponnese shed light on the significance of those ecologies and shifts in their respective settlement patterns. When they came across the terms “linen” and “wool,” Byzantine readers would have intuited the implied distinction between the Peloponnese’s two ecological zones of production, the well-watered plains where flax was cultivated and the mountains where newly founded settlements specialized in wool.

The repeated references to fabrics in Danelis’s story confirms that Patras had established itself as a city

of high-quality cloth production. Her gift of carpets, for example, was made on an annual basis: “Danelis would send yearly gifts, none lesser than those she had brought on the first occasion.”<sup>91</sup> The raw material for the carpet and the wool fabrics would have come from livestock herded in the Achaian and Eleian mountains in the Patras hinterland. Whether through formalized gift exchange, as described in the *Vita*, or through trade, the wool from these settlements may have reached larger markets, including the capital. Preparatory steps in the processing of wool, from shearing to fulling, would have occurred in the shepherd settlements even if the weaving took place in Patras’s urban workshops.

The region of Eleia had been an epicenter of textile production since antiquity. According to Pausanias, in the second century the region was known for its production of clothing. Eleia was the only place in Greece to produce a fine type of flax whose quality rivaled that of Palestine. Pausanias calls the fabric *bussos*, a term which has not allowed any precise material reconstruction.<sup>92</sup> Pausanias was so impressed by the quality of Eleian flax that in his description of *bussos* he discusses silk, which in antiquity was manufactured exclusively in China.<sup>93</sup> Seventeen centuries later, William Martin Leake described flax production in Gastouni, the Ottoman capital of Eleia, expressing his disappointment that the quality of flax in 1805 did not seem as great as in antiquity:

The chief produce of the arable land of Gastúni is flax, wheat, and two kinds of *Holcus*, both called *Kalambókki*; namely, maize and the *dhurra* of Egypt, called, from the smallness of the grain, *Small Kalambókki*. For flax the land is once ploughed in the spring, and two or three

87 R. Janin, *La géographie ecclésiastique de l’empire byzantin*, vol. 3, *Les églises et les monastères* (Paris, 1969), 343; R. Krautheimer, *Early Christian and Byzantine Architecture*, 4th ed. (New Haven, CT, 1986), 355–56.

88 *Náκος* = fleece; *τάπητας* = carpet.

89 Bekker, *Theophanes Continuatus*, 5.76.5–11; Ševčenko, *Chronographiae*, 261.

90 Bekker, *Theophanes Continuatus*, 5.84.12–13; Ševčenko, *Chronographiae*, 277.

91 Bekker, *Theophanes Continuatus*, 5.76.11–12; Ševčenko, *Chronographiae*, 261.

92 Pausanias, *Description of Greece*, trans. W. H. S. Jones and H. A. Ormerod (Cambridge, MA, 1918–35), 5.5.2, 2:400–403: “Here, and here only in Greece, does flax [*βύσσης*] grow. . . . The fine flax of Elis is as fine as that of the Hebrews, but it is not so yellow.”

93 Ibid., 6.26.6, 3:158–61: “The land of Elis is fruitful, being especially suited to the growth of fine flax. Now while hemp and flax, both the ordinary and the fine variety, are sown by those whose soil is suited to grow it, the threads from which the Seres make the dresses are produced from no bark, but in a different way as follows.” James Frazer notes that Pausanias’s passage is one of the few ancient references to Chinese silk: J. G. Frazer, ed. and trans., *Pausanias’s Description of Greece* (New York, 1898), 3:470–72, 4:110–12.



times in the ensuing autumn with a pair of oxen, when the seed is thrown in and covered with the plough. The plant does not require and hardly admits of weeding, as it grows very thick. When ripe it is pulled up by the roots, and laid in bundles in the sun. It is then thrashed to separate the seed; the bundles are laid in the river for five days, then dried in the sun, and pressed in a wooden machine. Contrary to ancient reputation, the flax of Gastúni is not very fine, which my informant ascribes to its being exposed to the cold and running water of the river, instead of being soaked in ponds; it is chiefly used in the neighbouring islands by the peasants, who weave it into cloths for their own use.<sup>94</sup>

Silk production is said to have been introduced into Constantinople in the sixth century when two legendary Byzantine monks smuggled cocoons. Byzantine silk was initially under tight imperial control, but sericulture spread to provincial cities in the ninth century.<sup>95</sup> Patras, along with Corinth and Thebes, became famous for its silk manufacturing. By the time of the Latin conquest, Peloponnesian silk had acquired an international reputation, as indicated by the gifts that the Latin elite offered to their patrons abroad. Following the Treaty of Sapienza in 1209, Geoffrey Villehardouin promised to send silk garments to the church of San Marco and to the doge of Venice.<sup>96</sup> Anselm, the Latin bishop of Patras, signed a contract in 1210 for the annual gift of a silk *samiticum* to the abbot of Cluny.<sup>97</sup> In 1262, Pope

Urban IV dispatched a letter to the bishops of the Morea requesting that they send him silken garments. In the second half of the thirteenth century, the port of Glarentza became the principal trading post for all Peloponnesian silk.<sup>98</sup> Furthermore, the silkworm (*blata*) gave its name in the ninth century to the neighborhood of Vlatadon in Patras (near present-day Vlatero), which must have been the city's silk manufacturing quarters. It was located in the commercial center of the Frankish city, where there is also textual reference for a "street of the shoemakers." The neighborhood Kandrianika, near the Panagia Alexiotissa, may also be related to silk manufacture; *kandredes* means "silk factories."<sup>99</sup> During the ninth century, two industries related to fabrics are known to have flourished in Patras—the production of paper and the extraction of purple dye from murex shells.<sup>100</sup>

Textile commerce in Patras might have been carried out by the city's Jewish community. According to the twelfth-century Jewish traveler Benjamin of Tudela, Patras had a community of fifty Jews (in contrast to one hundred across the bay in Naupaktos, three hundred in Corinth, and two thousand in Thebes).<sup>101</sup> When

94 Leake, *Travels*, 1:12–13.

95 R. S. Lopez, "Silk Industry in the Byzantine Empire," *Speculum* 20 (1945): 1–42, reprinted in idem, *Byzantium and the World Around It: Economic and Institutional Relations* (London, 1978); E. Weigand, "Die helladisch-byzantinische Seidenweberei," in *Eis mνήmēn Spuriōdwnos Lámprou* (Athens, 1935), 503–14; A. Muthesius, *Studies in Byzantine and Islamic Silk Weaving* (London, 1995); eadem, *Byzantine Silk Weaving, AD 400 to AD 1200* (Vienna, 1997); N. Oikonomides, "Silk Trade and Production in Byzantium from the Sixth to the Ninth Century: The Seals of Kommerkiarioi," *DOP* 40 (1986): 33–53.

96 G. L. Tafel and G. M. Thomas, eds., *Urkunden zur älteren Handels- und Staatsgeschichte der Republik Venedig, mit besonderer Beziehung auf Byzanz und die Levante: Vom neunten bis zum Ausgang des fünfzehnten Jahrhunderts* (Vienna, 1856–57; repr. Amsterdam, 1964), 2:100.

97 For the document, see L. de Mas Latrie, "Donation à l'abbaye de Cluny du monastère de Hiero Komio, près de Patras, en 1210,"

*BEC* 10, no. 1 (1848–49): 308–12. Before becoming bishop, Anselm was a monk at Cluny. He had strong connections to a number of monastic centers, including Hautecombe in Savoye, where he tried to get monks for a monastery in Patras. On the general activities of Anselm, see D. Zakythinos, "Ο αρχιεπίσκοπος Ἀντέλμος και τα πρώτα ἔτη της Λατινικῆς ἐκκλησίας Πατρῶν," *ΕΕΒΣ* 10 (1933): 401–17.

98 D. Jacoby, "Silk Production in the Frankish Peloponnese: The Evidence of Fourteenth-Century Surveys and Reports," in *Travellers and Officials in the Peloponnese: Descriptions, Reports, Statistics; 4th Symposium of History and Art 26–28 July 1991 in Honour of Sir Steven Runciman*, ed. H. A. Kalligas (Monemvasia, Greece, 1994), 46–47.

99 A. Moutzali, "Στοιχεία πολεοδομικής εξέλιξης της βυζαντινής Πάτρας," *Archaïologia* 30 (1989): 84–87; eadem, "Τοπογραφικά της Μεσαιωνικής Πάτρας," in *Αντίφωνον: Αφιέρωμα στον καθηγητή Ν. Β. Δρανδάκη*, ed. V. Katsaros (Thessalonike, 1994), 141.

100 Constantine Porphyrogenetos makes a passing reference to murex-shell fishers (κογχυλευταί) and paper makers (χαρτοποιοί) in the list of people exempt from the obligation to contribute horses in lieu of military service during Romanos I's campaign in Lombardy: Constantine VII Porphyrogenetos, *De administrando imperio*, ed. G. Moravcsik, trans. R. J. H. Jenkins, new rev. ed. (Washington, DC, 1967), 256–57.

101 The relative number of Jews in any city might not be an accurate indication of the extent of trade since not all Jews would have been merchants. Benjamin, for example, describes a group of Jewish farmers in Crissa, "where about 200 Jews live apart. They sow and reap on their own land"; M. N. Adler, ed., *The Itinerary of*



Fig. 9. Drawing of wall painting depicting Joachim and the shepherds, Peribleptos, Mistra (1348–80). G. Millet, *Monuments byzantins de Mistra: Matériaux pour l'étude de l'architecture et de la peinture en Grèce aux XIV<sup>e</sup> et XV<sup>e</sup> siècles* (Paris, 1910), pl. 126.1.

visiting Patras in 1800, François Pouqueville recorded epigraphic evidence “at the steps of the Synagogue,” not far from where the Byzantine dyeing works have been excavated by the Greek Archaeological Service.<sup>102</sup> Patras’s significance as a trading post is also noted in Venetian documents. Sometimes, small vessels would be dispatched from the port of Patras to the island

of Corfu, where the goods would be placed on larger galleys.<sup>103</sup> Emperor Alexios III’s chrysobull of 1198 and the treaty with Venice of 1204 show that Patras, Kalavryta, Methone, and Lakedaimon were the main Venetian outposts in the Peloponnese.<sup>104</sup>

By all indications, urban centers in the northwestern Peloponnese flourished economically between the ninth and thirteenth centuries. Although we cannot

*Benjamin of Tudela: Critical Text, Translation and Commentary* (London, 1907), 10. For the Jewish community in Naupaktos, see P. Christopoulos, “Η Εβραϊκή κοινότης Ναυπάκτου,” *ΕΕΣΜ* 1 (1968): 277–300.

102 F. C. H. L. Pouqueville, *Voyage de la Grèce*, 2nd ed. (Paris, 1826–27), 6:65n3. A fragmentary inscription of 1725 names an individual named Daniel; A. D. Rizakis, *Achaïe II: La cité Patras; Épigraphie et histoire* (Athens, 1992), 275–76, no. 293.

103 F. Thiriet, ed., *Régestes de délibérations du sénat de Venise concernant la Romanie* (Paris, 1958–61), 1:215, no. 921.

104 S. P. Lampros, ed., *Μιχαήλ Ακομινάτου του Χωνιάτου τα σωζόμενα* (Athens, 1879–80; repr. Groningen, 1968), 2:37; D. A. Zakythinos, “Μελέται περί της διοικητικής διαιρέσεως και της επαρχιακής διοικήσεως εν τῷ βυζαντινῷ κρατεῖ,” *ΕΕΒΣ* 17 (1941): 208–74.

directly relate urban prosperity with conditions in the agricultural countryside, we can at least hypothesize a viable venue through which products from the hinterland would find links to international markets through coastal ports. Repeated references to clothing, whether *bussos*, silk, flax, or wool, imply the availability of raw materials. The intensification of settlement patterns in the hilltops of the Peloponnese testifies to the importance of wool and husbandry in the productive life of medieval villages.

## Conclusion

Archaeological field surveys in the Peloponnese have produced ample evidence for the transhumant practices of the medieval peasant and the associated production of woolen textiles. The ethnoarchaeological work of the 1970s and 1980s illuminated the mechanics of the manufacture of woollens. Very few woolen textiles from the medieval Peloponnese have survived; those that do are all exports now in western Europe. A more coherent record of wool in the western Peloponnese comes from the domestic rubble walls that housed the manufacture of this important craft. Building on a half-century of pedestrian survey, the Morea Project illustrated the architectural character of wool-producing settlements in the northwestern Peloponnese. Although composed entirely of rubble walls and ceramics, this evidence helps illuminate the textual references to textile production in the region. From Danelis's gift of a woolen carpet to Emperor Basil I in the ninth century to Plethon's advice on textile production given to Emperor Manuel II in the fifteenth, the sources make clear that the Peloponnese was an epicenter of textile production in the middle and late Byzantine world.

While Velázquez's painting *The Spinners* articulates the methodological conflicts in studying textiles as works of high art versus products of human labor, a wall painting from the Peribleptos Church in Mistra places the relationship between humans and animals in a religious context (fig. 9).<sup>105</sup> In the church's fourteenth-century frescoes, we see a biblical Joachim communing with shepherds. The figures wear contemporary shepherd clothes, including a "shading hat" (*skiadion*), which had become the official insignia of the Palaiologan dynasty.<sup>106</sup> Joachim's interlocutors herd their sheep on a precipitous mountain resembling the site on which the church actually stands. The spiritual, political, and ecological fate of the Peloponnese rested on the management of its most important asset: its sheep and goats. The animals enlivened the landscape and determined the placement and architectural character of the region's rural buildings. Their material record is traceable on the inarticulate ground of this landscape through the remnants of rubble walls.

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105 K. Kourelis, "Religion in the Byzantine Countryside," in *Cambridge World History of Religious Architecture*, ed. R. Etlin and A. M. Yasin (Cambridge, forthcoming).

106 G. Millet, *Monuments byzantins de Mistra: Matériaux pour l'étude de l'architecture et de la peinture en Grèce aux XIV<sup>e</sup> et XV<sup>e</sup> siècles* (Paris, 1910), pl. 126.1; M. Chatzidakis, *Mystras: The Medieval City and the Castle; A Complete Guide to the Churches, Palaces, and the Castle* (Athens, 1981), 73–89.



